The Key concepts

Case 1:

- anatomy of back
- function of different anatomical structures of the back
- pathology and pathogenesis of back pain
- principle of dermatomes and myotomes
- application of knowledge learnt from anatomy
- use basic sciences in interpreting patient's symptoms and signs
- differences between X-rays, CT scan , and MRI scans
- pharmacology and mechanisms of action of NSAIDs and paracetamol

case 2:

- neuromuscular junction & signaling transduction
- mechanisms interfering with nerve signals across NMJ
- mechanisms underlying muscle contraction
- use of basic sciences in interpreting patient's symptoms and signs
- use of evidence in refining hypotheses
- pharmacology of drugs used in treatment of myasthenia gravis

case 3:

- causes and pathogenesis of knee joint
- anatomy of the knee joint
- sources of pain from the knee joint
- role of investigation in refining your hypotheses
- use of basic sciences in interpreting patient's symptoms and signs
- pharmacology of NSAIDs and cortisol
- differences between COX-1 and COX-2
- long-term rehabilitation programs